InWorld Challenge Rubric 1: Knowledge Spaces & Models

Category	***Score***
Knowledge Spaces	
Team Identifications and Collaborations • An informative visual includes team name, team members, and affiliations. (__/4) • Evidence clearly shows the team shared responsibility and worked together. (__/4) **Design Process (Team's Original Spinoff Innovation)** *Evidence of EACH of the steps in the Design Process must be clearly displayed in the Knowledge Space. See the Engineering Design Process Packet for more details.* **Identify the Problems** • A problem statement for applying the JWST technology to other situations is stated clearly. (__/4) **Identify Criteria and Constraints** • Conditions and limits to the solution (should be specific) are clearly identified as the technology is applied to a new situation. (__/4) **Brainstorm Possible Solutions** • Important information about the mission was considered in the spinoff. (__/4) • The reasons the team did or did not choose brainstormed ideas are clearly identified. (__/4) **Select a Design** • Sketches clearly depict the design. (__/4) • Strengths and weaknesses of the design are discussed. (__/4) **Content Application and Merit of the Design** • Design is feasible and based on accurate applications of science and mathematical concepts. (__/4) • Explanation includes evidence of research to support science and mathematical concepts. (__/4)	**____ /40**

Models	
Tools • Tool(s) used to create 3D InWorld Models are identified. (__/4) **First Model – JWST** • A realistic 3D model of JWST is included in the Knowledge Space. (__/4) **Second Model – JWST Spinoff** • An image of the original spinoff technology is included. (__/4) • A realistic 3D model of original spinoff technology is included in the Knowledge Space. (__/4) • Strengths and weaknesses of the design are displayed. (__/4) **Third Model – Tech Transfer (Apply the RW technology to other situations)** • A realistic 3D model depicting the use of the JWST technology in another situation is included in the Knowledge Space. (__/4) • Strengths and weaknesses of the design are displayed. (__/4)	**____ /28**
******Note: Judges may award up to 8 additional points for unique and exceptional work.* (__/8)**	**Total: ____ / 76**

Assessment

4 (Excellent) = All criteria (procedures, steps, and details) are met and followed.
3 (Good) = Most criteria are met with only a few errors.
2 (Fair) = Many criteria are met, but work has significant errors.
1 (Poor) = Most criteria are not met.
0 (No effort) = No effort to meet criteria.